

## **EDUCATION**

### **University of Wisconsin-Madison** 2016-2019

Ph.D. Nelson Institute for Environmental Studies

*Interdisciplinary degree, focused on science and risk communication*

Science, Media, and the Public Research Group (<https://scimep.wisc.edu/>)

Minor in Life Sciences Communication

Dissertation: Science & the Authoritarian: Deference to Scientific Authority & How It Disables Democratic Deliberation on Controversial Science Issues

### **University of Wisconsin-Madison** 2014-2016

Master of Science in Environment & Resources

Certificate in Energy Analysis and Policy

### **Harvard University** 2009-2013

Bachelor of Arts in History of Science

*Focus on power and equity in access to science and societal decision-making*

Minor in Earth and Planetary Sciences, *with a focus on geology field- and coursework*

*Additional coursework in history, environmental studies, and literature at:*

Albert-Ludwigs-Universität Freiburg, Freiburg, Germany

Universität Basel, Basel, Switzerland

## **RESEARCH & GRANT-WRITING**

### **Associate Director of Research & Evaluation – Science Communication Lab** 2024-present

*Science communication through film, Berkeley, CA, USA*

- Integrating communication and education research into film production to experiment with how film can connect people and better convey complex science and social issues with diverse audiences. Research focuses on storytelling, emotions, and the nature of science, or science as a human endeavor, and socio-scientific issues.
- Wrote and conducting research as a consultant for a successful grant proposal funded by the Gordon & Betty Moore Foundation to integrate social science into feature-length documentary filmmaking from pre- to post-production (PI: Sarah Goodwin; \$3,264,646).

### **Associate Scientist – Oregon Research Institute** 2024-present

- Advancing research on science literacy and its many definitions, posited and tested antecedents, and outcomes.

### **Consultant – Association of Science and Technology Centers (ASTC)** 2021; 2024-present

*Community Science Initiative, Washington, D.C., USA*

- Synthesizing research on community science, its attributes and potential outcomes, and evaluation approaches, for the ASTC Community Science Initiative landscape report.  
<https://www.astc.org/impact-initiatives/astcs-community-science-initiative/>. Focused on how

communities can conduct research informed by community experience and priorities to advance community goals.

**Consultant - Civic Science Fellows Learning Program**

2023-present

*Rita Allen Foundation, Princeton, NJ, USA*

- Informed and advanced iterations of the Civic Science Fellows Program, to support cross-cutting, inclusive collaborations and democratic decision-making across science and civic life. Developed replicable processes and more widely accessible content to create a sustainable and effective learning program in civic science. <https://civicsciencefellows.org/>.

**Researcher & Consultant – Science Communication Lab**

2020-2024

- Wrote and conducted research as consultant for successful National Science Foundation grant proposal for “Collaborative Research: A new model for producing science documentaries: Building collaborations between scientists and storytellers to test methods of communication in film” (Award # AISL-2006010; PIs: Sarah Goodwin & Dietram Scheufele; \$500,000).

**Researcher I & Civic Science Fellows Program Learning Coordinator**

2021-2023

*UW-Madison Life Sciences Communication Department, Madison, WI, USA*

- Strengthened and expanded the Civic Science Fellows Program, creating the civic science learning program, covering interdisciplinary, evidence-based approaches to advancing equitable, replicable, and systems-focused research and practice for fellows and program partners from diverse fields and sectors.
- Co-wrote supporting grant proposal and submitted bi-annual reports to the Science in Society Funders Collaborative, made up of the Rita Allen Foundation, Gordon & Betty Moore Foundation, Kavli Foundation, the Burroughs Wellcome Fund, the Chan Zuckerberg Initiative, and the David and Lucile Packard Foundation.

**Consultant – National Academies of Sciences, Engineering, and Medicine (NASEM)**

2021

*Collaborating with Communities Roundtable, Washington, D.C., USA*

- Developed framework and literature review on community-engaged science to structure design of the Roundtable discussion, hosted by the NASEM Standing Committee on Advancing Science Communication and by the Civic Science Fellows Program.

**Civic Science Postdoctoral Fellow – University of Wisconsin-Madison**

2019-2021

*Life Sciences Communication Department, Madison, WI, USA*

- Developed and supported the interdisciplinary Civic Science Fellows Program through its launch and inaugural cohort of fellows.
- Grant-writing: Co-wrote original grant proposal and submitted bi-annual reports to the Science in Society Funders Collaborative, made up of the Rita Allen Foundation, Gordon & Betty Moore Foundation, Kavli Foundation, the Burroughs Wellcome Fund, the Chan Zuckerberg Initiative, and the David and Lucile Packard Foundation.

**Co-Investigator – American Society for Cell Biology**

2020

*Impact of Science Communication Awards project, Washington, D.C., USA*

- Investigated the roles of science institutions’ public engagement awards in incentivizing science communication and engagement, and in supporting institutional cultures that value engagement and greater inclusion of diverse publics in science institutions. With support from the Kavli Foundation and in collaboration with researchers at the University of Texas at Austin, Rutgers University, and the American Society for Cell Biology.

- Consultant – American Association for the Advancement of Science** 2020  
*Landscape of Public Opinion of Artificial Intelligence, Washington, D.C., USA*
- Conducted assessment of public opinion research, policies, and equity issues concerning AI, outlining recommendations for policymaking, engagement, and future research in a white paper to inform future AAAS projects. Focused on AI related to addressing the COVID-19 pandemic, issues of equity in representation and distribution of risk and benefits, and AI in other public health contexts.
- Project Assistant – UW-Madison Life Sciences Communication Department** 2017-2019  
*ChemAttitudes: Engagement with Chemistry project, Madison, WI, USA*
- Subcontracted on NSF grant by the Museum of Science, Boston, with the American Chemical Society, to test effective communication and engagement with chemistry within and outside of science museums.
  - Involved in grant proposal development, budgeting, and reporting to NSF. (Award # AISL-1612482, PI: Larry Bell. Subcontract: \$154,745; total grant: \$2.6 million).
- Consultant – National Academies of Science, Engineering, & Medicine (NASEM)** 2018  
*Committee on Reproducibility and Replicability in Science, Washington, D.C., USA*
- Commissioned by NASEM committee to synthesize research on public perceptions of uncertainty in science and analyze news coverage of reproducibility and replicability in science, to inform the NASEM consensus report, *Reproducibility and Replicability in Science*.
- Project Assistant – Morgridge Institute for Research** 2015-2018  
*Engagement on Emerging Science project, Madison, WI, USA*
- Designed and conducted research on public and scientists' perceptions of environmental and science issues, through experiments, surveys, interviews, and focus groups, to build effective communication and engagement.
  - Developed successful NSF grant proposal, "Enabling decision-relevant debates about human genome editing," testing how to enable deliberation across value divisions relevant to gene editing (PIs: Dominique Brossard & Dietram Scheuele Award # SES-1827864; \$449,977).
- Consultant – City of Madison, Wisconsin** 2015  
*2014 Carbon Emissions Inventory, Energy Analysis and Policy Capstone, Madison, WI, USA*
- Conducted carbon emissions inventory for the City of Madison, modeling opportunities for emissions reductions and impacts on air quality, public health, and sustainability goals. Presented findings to the Sustainable Madison Committee, City of Madison representatives, local energy industries and utilities, and non-governmental environmental and developmental organizations.
- Bunn Distinguished Graduate Fellow in Energy Policy – UW Madison** 2014-2015  
*Energy Analysis and Policy Certificate Program, Madison, WI, USA*
- Studied technical, environmental, economic, health, and policy factors shaping domestic and global energy systems. Researched public perceptions of hydraulic fracturing in the U.S. and implications for communication and policymaking.
- Tobis Fellow – UC-Irvine Center for the Scientific Study of Ethics and Morality** 2013-2014  
*Gender Equity in Academia project, Irvine, CA, USA*
- Continued research on gender equity in academia, started at the Radcliffe Institute for Advanced Study (below).
- Research Assistant – Radcliff Institute for Advanced Study, Harvard University** 2012-2013  
*Gender Equity in Academia project, Cambridge, MA, USA*

- Researched barriers to gender equity in academia, conducting interviews with university presidents, faculty, and students, and analyzing resulting qualitative data to identify challenges and best practices for achieving equity.

## **TEACHING**

### **Instructor of Record – Data Analysis in Communication Research** Spring 2019

*Life Sciences Communication 660, University of Wisconsin-Madison*

Graduate quantitative data methods and analysis course for communication research. Responsible for content and instruction (11 students).

### **Teaching Assistant – Public Opinion & Science** Fall 2018

*Life Sciences Communication 902, University of Wisconsin-Madison*

Interdisciplinary graduate seminar on communication, public opinion, and media effect theories relevant to science communication research and practice (25 students).

### **Teaching Assistant –The Science of Storytelling** Spring 2018

*Life Sciences Communication 100, University of Wisconsin-Madison*

Interdisciplinary undergraduate expository writing and public speaking course. Independently taught two sections of 15 students each.

### **Teaching Assistant – Science & Social Media** Spring 2018

*Life Sciences Communication 875, University of Wisconsin-Madison*

Interdisciplinary graduate seminar on science communication research and practice through social media (14 students).

### **Teaching Assistant – Forum on the Environment** Spring 2016

*Environmental Studies 101, University of Wisconsin-Madison*

Interdisciplinary undergraduate lecture course – organized weekly guest lectures and developed individual and small-group activities (75 students).

### **Teaching assistant – Introduction to Energy Analysis and Policy** Fall 2015

*Environmental Studies 809, University of Wisconsin-Madison*

Interdisciplinary graduate course on energy systems, technologies, and domestic and global energy policy (30 students).

## **HONORS AND AWARDS**

### **AEJMC Article of the Year, Second Place – ComSHER Division** 2021

*Association for Education in Journalism and Mass Communication, Division on Communicating Science, Health, Environment, and Risk*

For: Howell, E. L. & Brossard, D. (2021). (Mis)informed about what? What it means to be a science-literate citizen in a digital world. *Proceedings of the National Academy of Sciences*, 118(15).

### **AEJMC Top Paper Award, Third Place – Electronic News Division** 2020

*Association for Education in Journalism and Mass Communication*

For: Anderson, J. T., Howell, E. L., Xenos, M. A., Scheufele, D. A., & Brossard, D. Learning without seeking? Incidental exposure to science news on social media & knowledge of gene editing.

<b>Professional Development Grant &amp; Travel Grant</b> <i>Energy Analysis and Policy Program, University of Wisconsin-Madison</i>	2019
<b>Graduate Travel Awards for Professional Development</b> <i>Department of Life Sciences Communication, University of Wisconsin-Madison</i>	2015-2019
<b>Linda Latham Scholar, Summer Study on Energy Efficiency in Buildings</b> <i>American Council for an Energy Efficient Economy</i>	2016
<b>Bunn Distinguished Graduate Fellow</b> <i>Energy Analysis and Policy Program, University of Wisconsin-Madison</i>	2014-2015
<b>Jerome and Hazel Tobis Fellow</b> <i>Center for the Scientific Study of Ethics and Morality (Ethics Center), University of California Irvine School of Social Sciences</i>	2013-2014
<b>Science and Technology Studies Undergraduate Essay Prize</b> <i>Kennedy School of Government, Harvard University</i>	2013
<b>U.S. Presidential Scholar – Montana representative</b> <i>U.S. Department of Education</i>	2009

## **PUBLICATIONS**

### **Peer-reviewed articles**

- Molder, A., **Howell, E.**, Goodwin, S., Behrman, S., & Mathews, S. (*conditionally accepted*). Engaging short film activity that supports learning, science identity, and nature of science comprehension. *Journal of Microbiology and Biology Education*.
- Mede, N. G., **Howell, E. L.**, Schäfer, M. S., Metag, J., Brossard, D., & Beets, B. (*forthcoming*). Measuring science literacy in a digital world: Development and validation of a new multi-dimensional survey scale. *Science Communication*. DOI: 10.1177/10755470251317379
- Eom, D., Molder, A., Tosteson, H., **Howell, E. L.**, Scheufele, D. A., Goodwin, S. S., DeSalazar, M., & Kirschner, E. (*forthcoming*). Race and Gender Biases Persist in Public Perceptions of Scientists' Credibility. *Scientific Reports*.
- **Howell, E. L.**, Behrman, S., Kirschner, E., & Goodwin, S. S. (2024). Storytelling in science film: Narrative engagement relates to greater knowledge, interest, and identification with science. *Science Communication*. DOI: [10.1177/10755470241269885](https://doi.org/10.1177/10755470241269885)
- Wirz, C. D., **Howell, E. L.**, Scheufele, D. A., Brossard, D., & Xenos, M. A. (2023). Examining expertise: Synthetic biology experts perceptions of risk, benefit, and the public for research and applications regulation. *Public Understanding of Science*. DOI: [10.1177/09636625231166652](https://doi.org/10.1177/09636625231166652)
- Beets, B., Newman, T.P., **Howell, E.L.**, Bao, L., Yang, S. (2023). Surveying public perceptions of artificial intelligence in health care in the United States: Systematic review. *Journal of Medical Internet Research*, 25, e40337. DOI: [10.2196/40337](https://doi.org/10.2196/40337)
- Krause, N. M., Beets, B., **Howell, E. L.**, Tosteson, H., & Scheufele, D. A. (2023). Collateral damage from debunking mRNA vaccine misinformation. *Vaccine* 41(4): 922-929. DOI: 10.1016/j.vaccine.2022.12.045
- Wirz, C. D., Shao, A., Bao, L., **Howell, E. L.**, Monroe, H., Chen, K. (2022). Media systems and attention cycles: Volume and topics in news coverage of COVID-19 in the United States and China. *Journalism & Mass Communication Quarterly* 99(4): 1048-1071. DOI: 10.1177/10776990211049455

- Calice, M. Bao, L., Freiling, I., **Howell, E. L.**, Xenos, M. A., Yang, S., Brossard, D., Newman, T. P., & Scheufele, D. A. (2021). Polarized platforms? How partisanship shapes perceptions of “algorithmic news bias.” *New Media and Society* 25(11): 2833-2854. DOI: 10.1177/14614448211034159.
- Anderson, J. T., **Howell, E. L.**, Xenos, M. A., Scheufele, D. A., & Brossard, D. (2021). Learning without seeking? Incidental exposure to science news on social media & knowledge of gene editing. *Journal of Science Communication*, 20(4): 1-22. DOI: 10.22323/2.20040201.
- Kollmann, E. K., Beyer, M., **Howell, E. L.**, Anderson, A., Weitzman, O., Bequette, M., Haupt, G., Velázquez, H., Yang, S., & Scheufele, D. A. (2021). Collaboration for chemistry communication: Insights from a research-practice partnership. *Journal of Science Communication*, 20(4): 1-13. DOI: 10.22323/2.20040801.
- **Howell, E. L.**, Yang, S., Holesovsky, C., & Scheufele, D. A. (2021). Communicating chemistry through cooking & personal health: Everyday applications increase perceived relevance, interest, & self-efficacy in chemistry. *Journal of Chemical Education* 98(6): 1852–1862. DOI: 10.1021/acs.jchemed.1c00125.
- **Howell, E. L.** & Brossard, D. (2021). (Mis)informed about what? What it means to be a science-literate citizen in a digital world. *Proceedings of the National Academy of Sciences*, 118(15). DOI: 10.1073/pnas.1912436117.
- **Howell, E. L.** (2020). Science communication in the context of reproducibility and replicability: how non-scientists navigate scientific uncertainty. *Harvard Data Science Review*, 2(4). DOI: 10.1162/99608f92.f2823096
- **Howell, E. L.**, Scheufele, D. A., Brossard, D., & Xenos, M. A. (2020). Deference and decision-making in science and society: How deference to scientific authority goes beyond confidence in science & scientists to become authoritarianism. *Public Understanding of Science*, 29(8): 1-19. DOI: 10.1177/09636625200962741.
- Wirz, C. D., **Howell, E. L.**, Brossard, D., Xenos, M. A., & Scheufele, D. A. (2020). The state of GMOs on social media: An analysis of state-level variables and discourse on Twitter in the U.S.A. *Politics and the Life Sciences*, 1-16. DOI:10.1017/pls2020.15.
- **Howell, E. L.**, Kohl, P., Scheufele, D. A., Clifford, S., Shao, A., Xenos, M. A., & Brossard, D. (2020). Enhanced threat or therapeutic benefit? Risk & benefit perceptions of human gene editing by purpose & heritability of edits. *Journal of Risk Research* 25(2): 139-155. DOI: 10.1080/13669877.2020.1806911.
- **Howell, E. L.**, Yang, S., Beets, B., Brossard, D., Scheufele, D. A., & Xenos, M. A. (2020). What do we (not) know about global views of human gene editing? Insights and blind spots in the CRISPR era. *The CRISPR Journal*. 3(3): 148-155. DOI: 10.1089/crispr.2020.0004.
- **Howell, E. L.**, Wirz, C. D., Scheufele, D. A., Brossard, D., & Xenos, M. A. (2019). Seeing through risk-colored glasses: Risk and benefit perceptions, knowledge, and the politics of fracking in the United States. *Energy Research & Social Science*. 55: 168-178. DOI: 10.1016/j.erss.2019.05.020.
- **Howell, E. L.**, Nepper, J., Brossard, D., Xenos, M. A., & Scheufele, D. A. (2019). Engagement present and future: Graduate student and faculty perceptions of social media and the role of the public in science engagement. *PLoS ONE*. 14(5): e0216274. DOI: 10.1371/journal.pone.0216274.
- Rose, K. M., **Howell, E. L.**, Su, L. Y.-F., Xenos, M. A., Brossard, D., & Scheufele, D. A. (2019). Distinguishing scientific knowledge: The impact of different measures of knowledge on GM food attitudes. *Public Understanding of Science*. 28(4): 449-467. DOI: 10.1177/0963662518824837.
- **Howell, E. L.**, Wirz, C. D., Brossard, D., Jamieson, K. H., Scheufele, D. A., Winneg, K. M., & Xenos, M. A. (2018). National Academies of Sciences, Engineering, and Medicine report on genetically engineered crops influences public discourse. *Politics and the Life Sciences*. 37(2): 250-261. DOI:10.1017/pls.2018.12.
- Rose, K. M., **Howell, E. L.**, Scheufele, D. A., Brossard, D., Xenos, M. A., Shapira, P., Youtie, J., & Kwon, S. (2018). The values of synthetic biology: Researcher views of their field and participation in public engagement. *BioScience*. 68(11): 782-791. DOI: 10.1093/biosci/biyy77.

- Scheufele, D. A., Xenos, M.A., **Howell, E. L.**, Rose, K. M., Brossard, D., & Hardy, B. W. (2017). U.S. attitudes on human genome editing. *Science*. 357(6351): 553-554. DOI: 10.1126/science.aan3708.
- **Howell, E. L.**, Li, N., Akin, H., Scheufele, D. A., Xenos, M. A., & Brossard, D. (2017). How do U.S. state residents form opinions about ‘fracking’ in social contexts? A multilevel analysis. *Energy Policy*. 106: 345-355. DOI: 10.1016/j.enpol.2017.04.003.
- Monroe, K. R., Choi, J., **Howell, E.**, Lampros-Monroe, C., Trejo, C., & Perez, V. (2014). Gender equality in the ivory tower, and how best to achieve it. *PS: Political Science & Politics*. 47(2): 418-426. DOI: 10.1017/S104909651400033X.

### **White papers and reports**

- Hendricks, R., AbiGhannam, N., **Howell, E.**, Dudo, A., & Eatman, T. (2022). Awarding engagement: The impact of scientific societies’ awards recognizing work at the intersections of science and society. <https://resources.informalscience.org/awarding-engagement-impact-scientific-societies%E2%80%9999-awards-recognizing-work-intersections-science-and>
- Newman, T. P., **Howell, E. L.**, Bao, L., Beets, B., & Yang, S. (2020). Landscape assessment of public opinion work on use of AI in public health. Commissioned by the *AAAS Center for Public Engagement with Science and Technology*, the American Association for the Advancement of Science. <https://www.aaas.org/ai2/publications>
- **Howell, E. L.** (2018). Public perceptions of uncertainty and media reporting of reproducibility and replicability in science. Commissioned by *The Committee on Reproducibility & Replicability in Science*, National Academies of Sciences, Engineering, and Medicine.

### **Chapters in edited volumes**

- **Howell, E. L.** (*forthcoming*). Deference to scientific authority and public perceptions. In: *Oxford Research Encyclopedia of Communication*. Oxford, UK: Oxford University Press.
- **Howell, E. L.**, Scheufele, D. A., Brossard, D., Xenos, M. A., Kwon, S., Youtie, J., & Shapira, P. (2020). Scientists’ and the publics’ views of synthetic biology. In Trump, B. D., Cummings, C., Kuzma, J., & Linkov, I. (Eds.), *Synthetic Biology 2020: Frontiers in risk analysis and governance* (pp. 371-387). Cham, Switzerland: Springer.
- **Howell, E. L.** & Brossard, D. (2019). Science engagement & social media. In Newman, T. (Ed.), *Theory and Best Practices in Science Communication Training* (Chapter 4). New York, NY: Routledge.
- **Howell, E. L.** & Scheufele, D. A. (2018). Public engagement. In M. H. Bornstein (Ed.), *The SAGE Encyclopedia of Lifespan Human Development* (4: 1779-1781). Washington, DC: Sage Publications.

### **Perspectives & op-eds**

- **Howell, E. L.**, Krause, N. M., Cheney, I., Kirschner, E., & Goodwin, S. S. (2024). Forum response, in An evolving need for trusted information. *Issues in Science and Technology* 40(2), Winter. <https://issues.org/informing-policymakers-sean-trust-groves-forum/#emily-l-howell>
- Christopherson, E. G., **Howell, E. L.**, Scheufele, D. A., Viswanath, K., & West, N. P. (2021). How science philanthropy can build equity. *Stanford Social Innovation Review*, Fall. [https://ssir.org/articles/entry/how\\_science\\_philanthropy\\_can\\_build\\_equity#](https://ssir.org/articles/entry/how_science_philanthropy_can_build_equity#).
- Newman, T., **Howell, E. L.**, & Brossard, D. (2021). COVID-19 public health messages have been all over the place – but researchers know how to do better. *The Conversation*, April 14. <https://theconversation.com/covid-19-public-health-messages-have-been-all-over-the-place-but-researchers-know-how-to-do-better-150584>

### **INVITED TALKS**



**Braga Science Film Festival**, Virtual – November 25, 2023

Panelist on roundtable: *Is cinema doing enough to fight science illiteracy?*

<https://bragasciencefilmfest.com/programme-25nov/>

**Science Public Engagement Partnership (SciPEP) Conference – Communicating the Future: Engaging the Public in Basic Science**, Virtual – July 28, 2021

Guest speaker on deference to scientific authority and its implications for civic and science engagement.

**Mission Forward podcast, Season Three – The Future of Health**, Virtual – June 14, 2021

Guest speaker public health communication – lessons from the COVID-19 pandemic.

<https://mission.partners/episode-305-why-public-health-matters-to-private-lives-with-emily-howell-and-todd-newman/>

**Center for Population Health Research, University of Montana – Science Meeting**,

Missoula, MT – February 9, 2021

Guest speaker on communicating for civic engagement in science and health.

**How Society Deals with Technological Hazards, University of Wisconsin**, Virtual – April 27, 2020

Guest lecturer on risk perceptions and risk communication in health and science.

**National Academies of Sciences, Engineering, and Medicine – Symposium Addressing Misinformation**, Washington, D.C. – February 20, 2020

Panelist, discussing public perceptions of scientific uncertainty, on panel on *Trust in online health and science information*.

**Sigma Xi Annual Meeting – Science of Science Communication panel**, Madison, WI – November 15, 2019

Panelist, presenting work on advancing research-practice partnerships in communication, engagement, and informal learning.

**Midwest Center of Excellence – Vector-Borne Disease research group**, Madison, WI – October 10, 2019

Advised on communication strategies, particularly for addressing and preventing spread of misinformation, concerning Lyme disease prevention and treatment.

**Risk Communication, University of Wisconsin Course**, Madison, WI – September 26, 2019

Guest lecturer on the roles of trust and knowledge in public risk perceptions on health and science issues.

**Holtz Center for Science & Technology Studies Special Brown Bag on Gene Editing**, Madison, WI – March 13, 2019

Panelist, presenting work on U.S. views of human gene editing: Understanding and deliberating across diverse publics, goals, and values.

**Department of Life Sciences Communication Colloquium**, Madison, WI – February 13, 2019

Invited talk presenting research on understanding scientists, publics, and outcomes for science engagement.

**Committee on Reproducibility & Replicability in Science, National Academies of Sciences, Engineering, and Medicine**, Washington, D.C. – April 18, 2018

Invited presentation on public perceptions of scientific uncertainty and media coverage of reproducibility and replicability in science.

**Department of Life Sciences Communication Colloquium**, Madison, WI – March 21, 2018

Invited talk presenting research from: **Howell, E. L.**, Nepper, J., Brossard, D., Xenos, M. A., Scheufele, D. A., Cohort shift in engagement? Graduate student and faculty perceptions of engagement, social media, and the role of the public.



**Environmental Studies 901 – Professional Development for the Energy Analysis and Policy Certificate Program**, Madison, WI – October 12, 2017.

Invited talk on introduction to science communication theories and applications, for interdisciplinary graduate seminar in Energy Analysis and Policy program.

**Bagels and Research Colloquium, Morgridge Center for Public Service**, Madison, WI – October 5, 2017.

Invited presentation on *Science Engagement Across Campus: The Wisconsin Science Festival and Beyond*, on campus researchers' views of science engagement and the role of citizens and scientists in engagement and decision-making around science issues.

**PEER-REFEREED CONFERENCES**

**International Communication Association (ICA)**, Brisbane, Australia – June 18-19, 2024

***Preconference: "Science Communication as a Human Right"***

Mede, N. G., Schäfer, M. S., Metag, J., **Howell, E. L.**, Brossard, D., & Beets, B. *Measuring science literacy in a digital world: Development and validation of a new multi-dimensional survey scale*. Conference presentation.

**American Association for the Advancement of Science (AAAS) Annual Meeting**, Washington, D. C. – March 2-5, 2023

Session organizer for *Establishing boundary-spanning scientists and civic leaders across sectors* – panel discussion with Elizabeth Christopherson, Frances Colón, Tiffany Taylor, and Joyce Yen.

**AAAS Annual Meeting**, Virtual – January 4-7, 2022

Molder, A. L., **Howell, E. L.**, Scheufele, D. A., DeSalazar, M., Kirschner, E., & Goodwin, S. *Reaching beyond the proverbial choir with research-practice partnerships in filmmaking*. Poster session.

**Science Public Engagement Partnership (SciPEP) Conference – Communicating the Future: Engaging the Public in Basic Science**, Virtual – July 27-28, 2021

**Howell, E. L.**, DeSalazar, M., Goodwin, S., Kirschner, E., Martinek, A., Qian, Y., & Scheufele, D. A. (2021, July). *Connecting research and storytelling to engage with audiences through documentary film: insights from a scientist-filmmaker collaboration*. Poster session.

**Society for Risk Analysis Annual Meeting (SRA)**, Virtual – December 14-17, 2020

**Howell, E. L.**, Monroe, H., Wirz, C., Shao, A., Bao, L., & Chen, K. (2020, December). *Public opinion & news coverage of COVID-19: Risks & responsibility in U.S. perceptions of the pandemic*. Conference presentation.

**Association for Education in Journalism and Mass Communication (AEJMC)**,

San Francisco, CA – August 6-9, 2020.

Anderson, J., **Howell, E. L.**, Xenos, M. A., Scheufele, D. A., & Brossard, D. (2020, August). Learning without seeking: Incidental exposure to science news on social media may fill knowledge gaps. Conference paper.

**Public Communication of Science and Technology (PCST)**, Virtual – 2021.

**Howell, E. L.**, & Scheufele, D. A. (2020, May). U.S. scientists' views of gene editing: Measuring short-term impact of the documentary film, *Human Nature*. Conference paper.

**SRA Annual Meeting**, Arlington, VA – December 8-12, 2019.

**Howell, E. L.**, & Scheufele, D. A. CRISPR benefit, risk, and ambivalence: The impact of the documentary *Human Nature* on scientists' views of human gene editing. Conference paper.

**ICA**, Washington, D.C. – May 24-28, 2019.

**Howell, E. L.**, Wirz, C. D., Scheufele, D. A., Brossard, D., & Xenos, M. A. Seeing through risk-colored glasses: Risk, benefit, and political polarization in U.S. views of fracking. Conference paper.

**AAAS Annual Meeting**, Washington, D.C. February 14-17, 2019.

Panelist on *Improving Attitudes towards Chemistry through Informal Science Communication*, presenting Public views of chemistry: Relations to interest, relevance, and self-efficacy. Part of work on NSF Award # AISL-1612482.

**SRA Annual Meeting**, New Orleans, LA – December 2-6, 2018.

**Howell, E. L.**, Scheufele, D. A., Brossard D., Xenos, M. A., Deference, risk, & benefit in public perceptions of human genome editing. Conference presentation.

**Visitor Studies Association Annual Conference**, Chicago, IL – June 20, 2018

Panelist on *What Research Tells Us About Support Engagement in Science*, presenting Capturing interest, relevance, and self-efficacy for science engagement. Part of work on NSF Award # AISL-1612482.

**SRA Annual Meeting**, Arlington, VA – December 11-12, 2017.

**Howell, E. L.**, Kohl, P., Scheufele, D. A., Brossard D., Xenos, M. A., U.S. public on human genome editing: Purposes of edits drives attitudes. Conference presentation. *Presented in panel on Risk Communication in Public Health and Medical Contexts.*

**International Public Science Events Annual Conference**, Madison, WI – June 5-6, 2017.

Led session *Scaling Up While Drilling Down* on applying social science to science event design, outreach, and evaluation. Presented research from **Howell, E. L.**, Xenos, M. A., Scheufele, D. A., Brossard D., The role of values in understanding public and expert risk and benefit perceptions of the science. Conference paper.

**AAAS Annual Meeting**, Boston, MA – February 16-18, 2017.

**Howell, E. L.**, Wirz, C. D., Brossard, D., Scheufele, D. A., Jamieson, K. H., Winneg, K., & Xenos, M. A., The NAS release a consensus report on GE crops – with what impact? Conference poster.

**Midwest Association for Public Opinion Research Annual Conference**, Chicago, IL – November 18, 2016.

**Howell, E. L.**, Xenos, M. A., Scheufele, D. A., Brossard D., Public and expert perceptions of synthetic biology: The role of values in understanding public and expert risk and benefit perceptions of the science. Conference paper. *Presented in the Science and Technology Panel.*

**Association for Politics and the Life Sciences Annual Conference**, Madison, WI – October 23-24, 2015.

**Howell, E. L.**, Brossard, D., Scheufele, D.A., Xenos, M.A. Effects of ideology, trust, and knowledge on public risk-benefit perceptions of hydraulic fracturing in the U.S. Conference presentation. *Presented in the Energy Panel.*

**The International Association for Media and Communication Research Annual Conference**, Montreal, QC, Canada – July 12-16, 2015.

**Howell, E. L.**, Li, N., Akin, H., Brossard, D., Scheufele, D. A., & Xenos, M. A. Modeling public perceptions of ‘fracking’: A multilevel approach. Conference presentation. *Presented at the Environment, Science, and Risk Communication Working Group.*

## **ADDITIONAL POSITIONS**

- SAT and ACT test prep tutor, Galin Education, Middleton, WI – 2014-2018
- Dog hiker, Quick Paws, Missoula, MT – 2013-2014
- File room staff, Harvard Admissions Office, Harvard University, Cambridge, MA – 2011-2013
- Farm hand, Baldenwegerhof, Stegen-Wittental, Germany – 2012
- Pine beetle research field assistant, [Six Lab](#), Department of Ecosystem & Conservation Sciences, University of Montana – 2010
- Outcamping counselor, middle-school girls camp, Cheley Camps, Estes Park, CO – 2011
- Dorm cleaner, Dorm Crew, Harvard University, Cambridge, MA – 2009-2010